



## Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

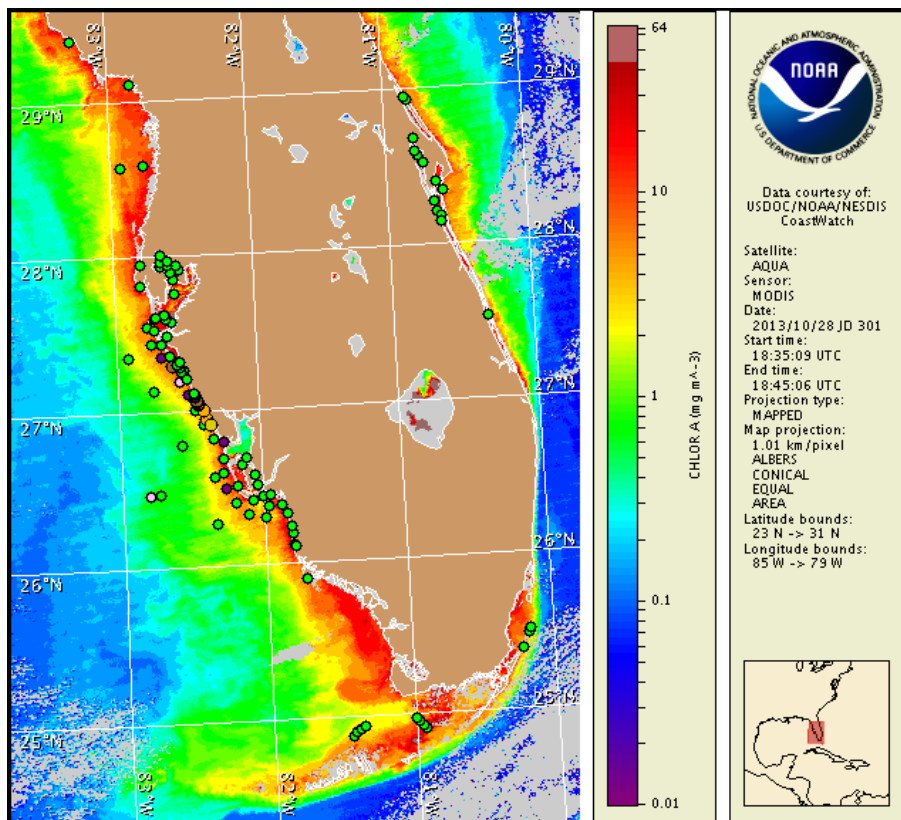
Wednesday, 30 October 2013

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, October 28, 2013



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from October 20 to 29: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). Cell count data are provided by Florida Fish and Wildlife Conservation Commission (FWC) Fish and Wildlife Research Institute. For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

[http://tidesandcurrents.noaa.gov/hab/habfs\\_bulletin\\_guide.pdf](http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf)

Detailed sample information can be obtained through FWC Fish and Wildlife Research Institute at:

<http://myfwc.com/redtidestatus>

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit at: <http://tidesandcurrents.noaa.gov/hab/bulletins.html>

## Conditions Report

Not present to medium concentrations of *Karenia brevis* (commonly known as Florida red tide) are present along- and offshore southwest Florida, as well as offshore the lower Florida Keys. *K. brevis* concentrations are patchy in nature and levels of respiratory irritation will vary locally based upon nearby bloom concentrations, ocean currents, and wind speed and direction. The highest level of potential respiratory irritation forecast for Wednesday, October 30 to Monday, November 4 is listed below:

**County Region: Forecast (Duration)**

**Southern Sarasota:** Very Low (W, Su-M), Moderate (Th-Sa)

**Northern Charlotte:** Very Low (W, Su-M), Moderate (Th-Sa)

**All Other SWFL County Regions:** None (W-M)

Check [http://tidesandcurrents.noaa.gov/hab/beach\\_conditions.html](http://tidesandcurrents.noaa.gov/hab/beach_conditions.html) for recent, local observations. Health information, from the Florida Department of Health and other agencies, is available at [http://tidesandcurrents.noaa.gov/hab/hab\\_health\\_info.html](http://tidesandcurrents.noaa.gov/hab/hab_health_info.html). Over the past several days, no reports of respiratory irritation or dead fish associated with *K. brevis* were received from Southwest Florida.

## Analysis

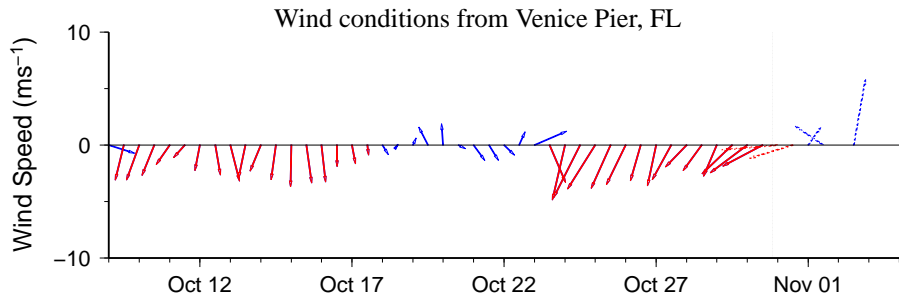
**\*\*The next regularly scheduled bulletin will be issued on Monday, November 4.\*\***

Recent samples collected alongshore Pinellas, Sarasota and Charlotte counties indicate that *Karenia brevis* concentrations range from 'not present' to 'medium' (FWRI, SCHD; 10/28-29). Several 'very low' to 'medium' concentrations of *K. brevis* were identified alongshore southern Sarasota County, with 'medium' concentrations detected alongshore Manasota Beach and Blind Pass in southern Sarasota County and 'low b' concentrations identified alongshore Englewood Beach in northern Charlotte County (FWRI, SCHD; 10/28-29). No dead fish or respiratory irritation associated with *K. brevis* have been reported in the past several days (FWRI, MML; 10/28-30).

Recent MODIS Aqua imagery (10/28, shown left) indicates a band of elevated to high chlorophyll (3 to 20  $\mu\text{g/L}$ ) stretching along- and offshore from Pinellas to Collier counties. Patches of very high chlorophyll (>20  $\mu\text{g/L}$ ) are also visible alongshore Sarasota to northern Collier counties.

Variable winds forecasted for today through Monday may minimize the potential for intensification and transport of *K. brevis* concentrations.

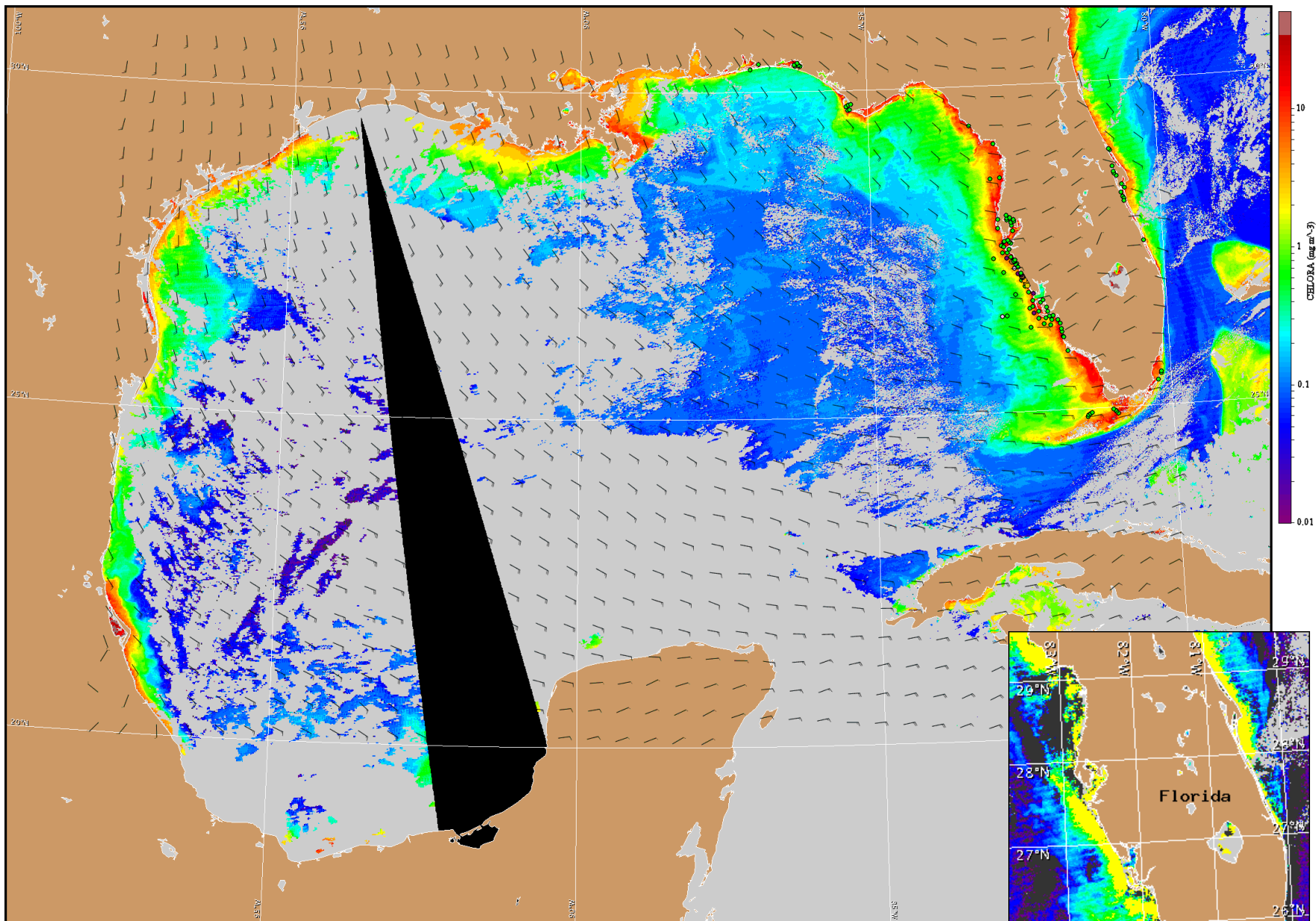
Yang, Derner



Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).

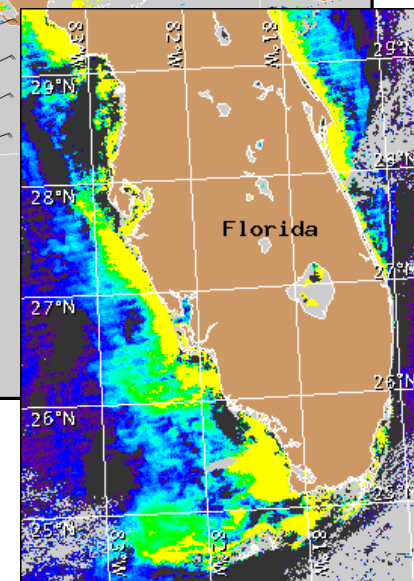
## Wind Analysis

**Southwest Florida:** Northeast winds (10kn, 5m/s) this afternoon becoming east (15kn, 8m/s) tonight. Southeast winds (10-15kn, 5-8m/s) Thursday. South winds (10-15kn) Friday becoming southwest (10kn) Friday night. Southwest winds (5-10kn, 3-5m/s) Saturday becoming northwest (10-15kn) then north (20kn, 10m/s) Saturday night. Northeast winds (20kn) Sunday diminishing to 10-15kn Sunday afternoon.



Satellite chlorophyll image and forecast winds for October 31, 2013 12Z with points representing cell concentration sampling data from October 20 to 29: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). Cell count data are provided by Florida Fish and Wildlife Conservation Commission (FWC) Fish and Wildlife Research Institute. For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

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Verified and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).